

Note on the Genus *Enanea* (Coleoptera, Tenebrionidae),
with Description of a New Species from
Amami-Ôshima Is., Japan*

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Abstract A new species of the tenebrionid genus *Enanea* is described from Amami-Ôshima Is. under the name of *E. chujoi* sp. nov. All the congeneric species hitherto known are enumerated, and a key to them is given.

The late Dr. Michio CHÛJÔ was one of the excellent taxonomists of the Coleoptera in Japan, an important leader of the Japanese Coleopterology, and left many achievement for us. We would like to dedicate this short paper to the memory of the late Dr. Michio CHÛJÔ, with our sincere condolence.

The genus *Enanea* LEWIS (tribe Gnathidiini) was erected in 1894, for a single species, *E. testacea* LEWIS from Ichiuchi in Kumamoto Prefecture, Kyushu. It has seldom been recorded after the original description, because of its utmost rareness among the Japanese tenebrionids. A second species of the genus was described by NAKANE (1984) under the name *E. yakushimana* on the basis of specimens taken in the natural forest of Yaku-shima Is. A third species was found on Amami-Ôshima Is., which will be described in this paper as *E. chujoi*, a close relative of *E. yakushimana*.

The localities of the three species are not far distant from one another, but Amami-Ôshima Is. has been separated from Yaku-shima Is. by the Tokara Straits since the late Pliocene, constituting the so-called “Watase’s Line”, a famous biogeographical boundary separating the Palearctic and the Oriental faunal elements. *Enanea testacea* at our hands was taken in Kagoshima Prefecture, Kyushu, and was identified from the original description, and the holotype of *E. yakushimana* in the NAKANE collection at the Hokkaido University Museum was examined through the courtesy of Dr. ÔHARA.

The holotype used herein is deposited in the Faculty of Agriculture, Ehime Uni-

* Contribution to the knowledge of Japanese Tenebrionidae (2).

versity. Abbreviations used in this paper are the same as those explained in a previous paper of the first author's (cf. ANDO, 2003, pp. 3–4).

Before going further, we thank Dr. Masahiro ÔHARA, the Hokkaido University Museum, for his kind permission to examine the NAKANE collection, Mr. Katsumi AKITA, Mie Pref. and Mr. Katsuya NAKANO, Nagoya City, for loan of the examined specimens. We are very grateful to Dr. Katsura MORIMOTO, Emeritus Professor of Kyushu University, for his kindness in critically reading the manuscript of this paper.

Enanea testacea LEWIS, 1894

[Japanese name: Kiïrochibi-gomimushidamashi]

(Figs. 3, 6, 9)

Enanea testacea LEWIS, 1894, 467 [Hab. Ichiuchi].

Redescription. Male. Body subparallel-sided. Head with posterior part shortened behind eyes; clypeus a little produced, hardly reflexed at sides, slightly emarginate at apex in median third, with a few coarse punctures; genae with short conical and rather thick transversely oblique horns, which are directed forwards at apex (Fig. 6) and shorter than the length of terminal segment of antennae; frons between horns moderately depressed, with coarse and sparse punctures; gula parallel-sided, with transverse rugosities. Mentum quadrate, well convex and strongly produced downwards at middle. Submentum small.

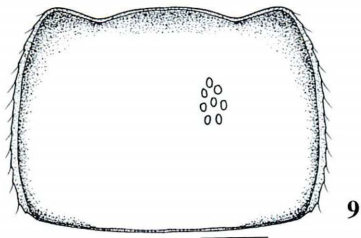
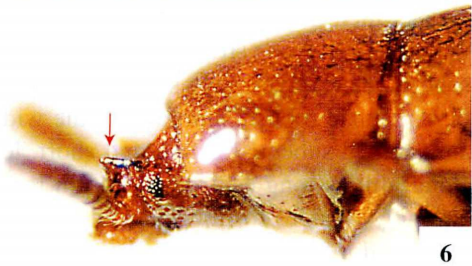
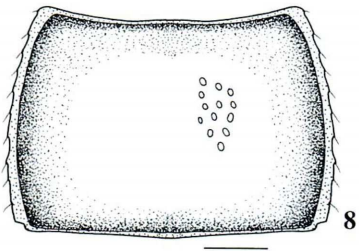
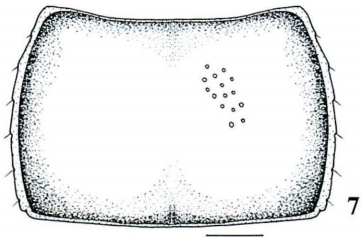
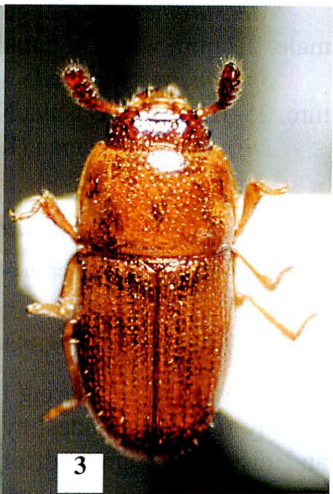
Pronotum quadrate, strongly and evenly convex, widest at basal third, PW/PL = ca. 1.52; punctures rather coarse, moderate in density; apical margin distinctly bisinuous, broadly and roundly produced in middle, very finely bordered; apical angles rounded, a little obtuse rather than rectangular; lateral margins weakly but distinctly serrate; basal angles narrowly cut off.

Elytra as wide as pronotum but the base is narrower than the maximum width of pronotum, with rows of punctures rather fine, moderate in density; rows of very fine punctures along suture about half density as those in 1st to 3rd rows of punctures; intervals slightly convex, with very sparse and pubescent punctures. Relative length of elytra and pronotum (elytra/pronotum) = ca. 2.10 and relative width of pronotum and elytral base (pronotum/elytral base) = ca. 1.03; EL/EW = ca. 1.38.

Prosternal process very narrow between coxae, and curved inwards behind coxae, with a produced tip. Mesosternum smooth, raised along middle. Metasternum very short, coarsely punctate at sides and depressed in middle. Abdominal sternites covered with coarse and dense large punctures.

Female. Genae strongly convex, but devoid of horns.

Figs. 1–9. *Enanea* spp. — 1, 4, 7, *E. chujoi* sp. nov., holotype; 2, 5, 8, *E. yakushimana* NAKANE, holotype; 3, 6, 9, *E. testacea* LEWIS, examined specimen occurring in Kagoshima, male. — 1–3, Habitus; 4–6, heads and pronota, in lateral view (red arrow showing horn); 7–9, pronota, in dorsal view. Scales: 0.25 mm.



Measurements. Length in male: 2.7 mm; width in male: 1.2 mm. Length in female: 2.7 mm; width in female: 1.2 mm.

Specimens examined. 1 ♂, Mt. Hoyoshitake, Kouyama-chô, Kagoshima Prefecture, 25-III-2000, Katsuya NAKANO leg.; 1 ♀, ditto.

Distribution. Japan (Kyushu).

***Enanea yakushimana* NAKANE, 1984**

[Japanese name: Hosokiirochibi-gomimushidamashi]

(Figs. 2, 5, 8)

Enanea yakushimana NAKANE, 1984, 597.

Notes. Head bearing horns not on frons but on genae; apical margin of clypeus slightly reflexed at sides; eyes devoid of inner ocular sulci, postocular areas strongly and distinctly depressed; elytra as wide as pronotum, relative length of elytra and pronotum (elytra/pronotum)=ca. 2.42 and relative width of pronotum and elytral base (pronotum/elytral base)=ca. 1.00. PW/PL=ca. 1.56; EL/EW=ca. 1.59.

Measurements. Length: 3.3 mm; width: 1.3 mm.

Type examined. 1 ♂ (holotype), "HOLOTYPE (red label)/Natur. Forest (750 m alt.) Yaku-Shima, 20. VIII. 1983, Sk. Yamane leg./*Enanea yakushimana* Nak. Det. T. Nakane"/"NAKANE Coll. SEHU JAPAN 1999 (green label)" Deposited in the Hokkaido University Museum, Sapporo.

Distribution. Japan (Yaku-shima Is.).

***Enanea chujoi* ANDO et M. T. CHÛJÔ, sp. nov.**

[Japanese name: Onitsuno-kirochibi-gomimushidamashi]

(Figs. 1, 4, 7)

Male. Body oblong and robust, parallel-sided, well convex above, shiny. Colour yellowish red-brown, darkened in part.

Head transversely hexagonal; clypeus transversely oval, depressed, shallowly emarginate at apex in median 3/5 and distinctly reflexed at the remaining parts of the apex, finely and hardly punctate; fronto-clypeal suture fine, not engraved; genae fully occupied by a pair of slender erect long horns, which are slightly oblique outwards, strongly curved backwards in apical portion as in Fig. 4; frons strongly and deeply depressed between horns, distinctly and sparsely punctate. Eyes very small and lateral, feebly produced, devoid of inner ocular sulci. Antennae robust, shorter than the width of head; 1st segment thickened and oval; 2nd and 3rd subequal, small and short, less than half as long as 1st, a little wider than long; 4th as long as 3rd; 4th to 6th rather shortened triangular; distal four segments strongly dilated, forming an oblong club; 10th short-oval. Terminal segment of maxillary palpi securiform and that of labials elongate-conical. Mentum cupulate, weakly convex towards middle, rather smooth,

with a faintly prominent tubercle at middle. Submentum flat and smooth. Space behind submentum strongly and transversely depressed. Gula triangular; gular suture clear but not engraved.

Pronotum transversely subquadrate, widest at middle, $PW/PL = \text{ca. } 1.58$, broadly strongly convex from marginal portion; punctures coarse, distinct and rather sparse, a little more minute on both sides; apical margin rather distinctly emarginate in median half, distinctly bordered; apical angles obtusely rounded, slightly reflexed and a little produced; lateral margins weakly and evenly arcuate, distinctly and narrowly bordered, irregularly and sparsely serrate, with a pubescent puncture on each serration; basal angles obtuse, not rounded, broadly cut off in part; basal margin almost straight, narrowly and distinctly bordered. Scutellum very transversely triangular, short and flat, with a few fine punctures.

Elytra strongly convex, subparallel-sided, $EL/EW = \text{ca. } 1.49$, with lateral margins sparsely and obsoletely serrate, and modified by a pubescent puncture at each serration as in pronotum; each with eight irregular rows of close and very coarse punctures, and a row of fine and sparse punctures along suture; intervals almost flat or feebly convex in part, with very sparse pubescent punctures; elytral epipleura uneven, sparsely punctate. Relative length of elytra and pronotum (elytra/pronotum) = $\text{ca. } 2.44$ and relative width of pronotum and elytra (pronotum/elytra) = $\text{ca. } 1.00$.

Ventral side weakly convex. Prosternum finely and sparsely punctate; prosternal process narrow and elevated between coxae, triangularly divergent posteriorly, with a small tubercle at middle of apex, which is directed downwards. Mesosternum transversely triangular, with a few coarse punctures. Metasternum short, well convex towards middle, sparsely and distinctly punctate, with clearly engraved median line. Metepisternum moderately punctate. Abdominal sternites finely and very sparsely punctate, covered with very fine rugulae.

Legs short, covered with yellow setae; posterior four femora more or less clavate; protibiae strongly dilated towards apices, with outer apical angle sharply angulate and a little produced.

Measurements. Length: 3.4 mm; width: 1.5 mm.

Holotype: ♂, Amami-Ōshima Is., Hatsuno, Nansei Isls., Japan, 5–VII–1972, H. IRIE leg.

Distribution. Japan (Amami-Ōshima Is.).

Diagnosis. This new species closely resembles *E. yakushimana* NAKANE, 1984, from Yaku-shima Is., Japan, but can be easily distinguishable from the latter in having the fronto-clypeal suture not engraved, the prosternal process with a small tubercle at the middle of apex, the metasternum sparsely and distinctly punctate, the frons sparsely punctate, strongly and deeply depressed between horns, the antennae robust, shorter than the width of head, with the 4th segment as long as the 3rd, the terminal segment of the labial palpi elongate-conical, and the mentum cupulate, weakly convex towards the middle, rather smooth.

LEWIS (1894) suggested that this genus has a pair of short ear-like elevations on

head, but the heads of *E. yakushimana* and this species bear distinct slender horns in male.

Etymology. The specific name of this species is dedicated to the late Professor Dr. Michio CHŪJŌ, who made a great contribution to the entomology in Japan.

Key to the Species of the Genus *Enanea* LEWIS, 1894 (Based in male)

1. Frons shorter; pronotum distinctly bisinuate at apex, with basal angles narrowly cut off; genal horns very short, conical and transverse basally, produced above at apices; maximum width of pronotum wider than elytral base. *E. testacea* LEWIS, 1894.
- Frons longer; pronotum hardly or not bisinuate at apex, with basal angles broadly cut off; genal horns very long and slender, longitudinal basally, produced posteriorly at apices; maximum width of pronotum as wide as elytral base. 2.
2. Body deeper in colour, wider and more robust than in the latter; head with more obscure punctures, the horns hooked near apices; pronotum PW/PL=ca. 1.58, more finely and sparsely punctate, extremely strongly convex above, the convexity arising suddenly from the marginal portion, and the anterior margin distinctly emarginate in median half, with border thick; elytra robust, EL/EW=ca. 1.49. *E. chujoi* sp. nov.
- Body lighter in colour, slender and less robust; head with distinct punctures, the horns not hooked near apices; pronotum PW/PL=ca. 1.56, more densely and coarsely punctate, moderately strongly convex above, the convexity arising gradually from the marginal portion to the center, and the anterior margin shallowly and evenly emarginate, with border fine; elytra slender, EL/EW=ca. 1.59. *E. yakushimana* NAKANE, 1984.

要 約

安藤清志・中條道崇：キイロチビゴミムシダマシ属の既知種と奄美大島産の1新種。—— 奄美大島で採集されたキイロチビゴミムシダマシ属 *Enanea* 属の1種を新種と認めて記載を行った。*Enanea* 属は、LEWIS (1894) が熊本県の人吉近くで採集した4頭のキイロチビゴミムシダマシ *E. testacea* LEWIS を基準種として記載創設されたが、この種はその後ほとんど採集されていなかった。近年になって別種ホソキイロチビゴミムシダマシ *E. yakushimana* NAKANE, 1984 が屋久島から新たに追加され、今回の新種オニツノキイロゴミムシダマシ（新称）*E. chujoi* ANDO et M. T. CHŪJŌ を含めると、本属のものは3種となり、すべて日本のみから記録されていることになる。借用することができたホソキイロチビゴミムシダマシ *E. yakushimana* の基準標本と近年採集されたキイロチビゴミムシダマシ *E. testacea* LEWIS を精査し、追加的知見を述べると同時に全種の検索表を付した。

なお、本種の種小名 *chujoi* はわが国の昆虫学に多大の貢献をなされた故中條道夫博士に献名したものである。

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